



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,652	02/21/2002	Paul A. LaBerge	501128.01	1945
7590	09/17/2004			EXAMINER RAY, GOPAL C
Paul F. Rusyn, Esq. DORSEY & WHITNEY LLP Suite 3400 1420 Fifth Avenue Seattle, WA 98101			ART UNIT 2111	PAPER NUMBER

DATE MAILED: 09/17/2004

5

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/081,652	LABERGE, PAUL A.
Examiner	Art Unit	
Gopal C. Ray	2111	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 21 February 2002.  
 2a) This action is **FINAL**.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-33 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1,2,4-7 and 9-33 is/are rejected.  
 7) Claim(s) 3 and 8 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 22 April 2002 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 4.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

1. Claims 1-33 are presented for examination.
2. The drawings filed on 4/22/2002 are acceptable by the examiner. However, direct any inquiries concerning drawing review by the USPTO draftsperson to the Drawing Review Branch at (703) 305-8404.
3. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification. Moreover, all claims should be revised carefully to eliminate all grammatical errors and antecedent basis problems. In general, applicant should define variables "N" and "M", i.e., range of the variables in claims first before using the variables alone in the claims.
4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).  
A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).  
Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).
5. Claims 16-33 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 40-53 of U.S. Patent No. 6,714,460. Although the conflicting claims are not identical, they are not patentably

distinct from each other because they are obvious variations. The elements of claims 16-33 of the instant application are anticipated by the elements of claims 40-53 of U.S. Patent No. 6,714,460

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 2-7 and 9-15 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 6,671,212 issued to Macri et al.

As per claim 1, the reference of Macri et al. teaches “placing a current data word ..., developing a next read data word ..., comparing the logic state of each data signal in the current read data word to the logic state of the corresponding data signal in the next read data word” (lines 6-11) in Fig. 4 and col. 2, lines 38-43; “determining the number of data signals in the next read data word that are changing from a first logic state in the current read data word to the complementary logic state in the next read data word, ..., applying than activated data bus inversion signal on one of the data masking pins” (lines 12-23) in Fig. 5 ; col. 2, lines 41-49 and col. 3, line 59 – col. 4, line 11.

11. The examiner wants to point out that variable “N” of the instant invention can be equated to “N/2” of the reference of Macri et al.

As per claim 2, the reference of Macri et al. teaches "wherein each data word includes  $2N$  data signals" in col. 2, lines 39-40.

As per claim 4, the reference of Macri et al. teaches "further comprising deactivating the data bus inversion signal when the determined number of data signals changing from the first logic state to the complementary logic is less than or equal to  $N$ " in col. 2, lines 45-52.

As per claims 5-7, claim 5 is a subset of claim 1 and the added limitations of dependent claims 6-7 are similar to the limitation of claims 1 and 4. Therefore, claims 5-7 are rejected for similar reasons as discussed in the rejection of claims 1 and 4.

As per claims 9-12, the claims recite limitations in various combination which are similar to claims 1 and 4. Therefore, claims 9-12 are rejected for similar reasons as discussed in the rejection of claims 1 and 4.

As per claim 13, the reference of Macri et al. teaches " $N=8$  and  $M=32$ " in col. 3, lines 36-39.

As per claim 14, the reference of Macri et al. teaches "one data word in the sequence includes data bus inversion data" in col. 2, lines 45-46.

As per claim 15, the reference of Macri et al. teaches "wherein all data words in the sequence are stored prior to applying the data bus inversion data to invert or not invert the data contained in the stored data words" in col. 3, lines 29-35.

8. Claims 3 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 3, 8 and 16-33 are allowable over

the prior art of record because each claim recites at least an additional feature such as "wherein the data bus includes X data signals, X being an integer multiple of 2N, and wherein a plurality of inverted next read data words are simultaneously applied on the data bus, each inverted next data word having an associated data bus inversion signal applied on an associated data masking pin" (claims 3 and 8), etc. which none of the prior art alone or in combination teaches.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is urged to consider the references. However, the references should be evaluated by what they suggest to one versed in the art, rather than by their specific disclosure. The prior art submitted by applicant has been considered by the examiner and made of record in the file.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gopal C. Ray whose telephone number is (703) 305-9647. The examiner can normally be reached on Monday - Friday from 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart, can be reached on (703) 305-4815. The new fax phone number for this Group is (703) 872-9306.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [\[mark.rinehart@uspto.gov\]](mailto:[mark.rinehart@uspto.gov]).

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to TC2100 receptionist whose telephone number is (703) 305-3900.

Lastly, paper copies of cited U.S. Patents and Patent Application Publications ceased to be mailed to applicants with office actions as of June 2004. Paper copies of Foreign Patents and Non-Patent Literature will continue to be included with office actions. These cited U.S. Patents and Patent Application Publications are available for download via Office's PAIR. As an alternate source, all U.S. Patents and Patent Application Publications are available on the USPTO web site ([www.uspto.gov](http://www.uspto.gov)), from the office of Public Records and from commercial sources. Applicants are referred to the Electronic Business Center (EBC) at <http://www.uspto.gov/ebc/index.html> or 1-866-217-9197 for information on this policy. Requests to restart a period for response due to a missing U.S. Patent or Patent Application Publications will not be granted.

*Gopal C. Ray*  
GOPAL C. RAY  
PRIMARY EXAMINER  
GROUP 2800